

AMENDED CLAIMS

1. (Currently Amended) An apparatus for providing a touch sensation to a user of a simulated real world software program supported by a computer comprising:

a garment covering a portion of the body of the user;

a plurality of electric-powered oscillating motors embedded within the garment to provide the sensation of touch on different areas of the body of the user;

a high-speed control interface with a logic address link to each of the oscillating motors and a link to a computer executing the simulated real world software program, supporting multiple modes of operation depending on software program type, said multiple modes comprising a first mode that generates a high order data bit output that activates multiple embedded motors covering an addressed area of the body and a second mode that generates a low order data bit output that activates a single embedded motor covering an addressed point of the body; and

said high-speed control interface activates one or more of said oscillating motors upon receipt of a command signal generated by said software program that translates into an logic address included in an information packet designating the corresponding link to the one or more oscillating motors, which corresponds to a particular desired touch sensation on one or more areas of the body of the user.

2. (Currently Amended) The apparatus for providing a touch sensation to a user of a simulated real world software program supported by a computer of Claim 1 further comprising:

a series of logic OR, NOR, NAND and AND gates organized into flip-flop memory circuits and arranged to form ~~[[one or]]~~ two more 4 x 16-bit decoders in the control interface to generate both high order binary data outputs for activating multiple embedded motors and low order binary data outputs for activating a single embedded motor, said high order and said low order bits decoded from a single binary data input; and a decision block in the high-speed control interface generating a logic address output to activate the oscillating motor.

3. (Previously Amended) The apparatus for providing a touch sensation to a user of a simulated real world software program supported by a computer of Claim 1 wherein the high-speed control interface comprises one of the following:

an infrared interface;
a Bluetooth interface; or
a universal serial bus (USB) interface.

4. (Original) The apparatus for providing a touch sensation to a user of a simulated real world software program supported by a computer of Claim 1 wherein the software program is a game entertainment program.

5. (Original) The apparatus for providing a touch sensation to a user of a simulated real world software program supported by a computer of Claim 1 wherein the software program is an adult entertainment program.

6. (Original) The apparatus for providing a touch sensation to a user of a simulated real world software program supported by a computer of Claim 1 wherein the software program is a medical application program.

7. (Original) The apparatus for providing a touch sensation to a user of a simulated real world software program supported by a computer of Claim 1 wherein the portion of the body covered is a limb.

8. (Currently Amended) A system for creating a touch sensation to a user of a

software program supported by a computer comprising:

a snug fitting garment covering a portion of a person's body;

a plurality of logic addressable electric-powered oscillating motors
embedded into the garment covering a sector of said body;

a high-speed control interface with a logic address link to each of
the oscillating motors, said control interface connected to said computer,
and said computer receiving an information packet containing a logic
address designating one or more of the oscillating motors; and

said software program supported by said computer translates data
inputs into the logic address of one or more of the oscillating motors using
the high-speed control interface to activate the one or more motors in said
sector that corresponds to a particular desired touch sensation on one or
more contact points within that sector to support multiple modes of
operation depending on the user type, said multiple modes comprising a
first mode that generates a high order data bit output that activates
multiple embedded motors covering an addressed area of the body and a
second mode that generates a low order data bit output that activates a
single embedded motor covering an addressed point of the body.

9. (Currently Amended) The system for creating a touch sensation to a user of a software program supported by a computer of Claim 8 further comprising a decision block circuit in the high-speed control interface that includes a 4x16-bit decoder generating bit values to activate all the motors in a sector corresponding to the logic address for said sector.
10. (Previously Amended) The system for creating a touch sensation to a user of a software program supported by a computer of Claim 8 further comprising a decision block circuit in the high-speed control interface that includes an output matrix 4x16-bit decoder generating high order bit values corresponding to the logic address for specified sectors.
11. (Previously Amended) The system for creating a touch sensation to a user of a software program supported by a computer of Claim 10 further comprising a decision block circuit in the high-speed control interface that includes an output matrix 4x16-bit decoder generating low order bit values corresponding to the logic address for an individual motor within a sector.
12. (Previously Amended) The system for creating a touch sensation to a user of a software program supported by a computer of Claim 11 wherein the high order bit and the low order bit values determine the logic address to activate a specified motor within a specified sector to support at least one mode of operation.

13. (Original) The system for creating a touch sensation to a user of a software program supported by a computer of Claim 8 wherein the touch sensation corresponds to a contact depicted by video data generated by the software program.

14. (Original) The system for creating a touch sensation to a user of a software program supported by a computer of Claim 8 wherein the touch sensation corresponds to a contact depicted by video data processed by the software program.

15. (Currently Amended) A method for generating a touch sensation to a person

using a computer application comprising the steps of:

providing a snug fitting garment covering a portion of the body of said person;

embedding a plurality of electric-powered oscillating motors in the garment covering said portion of the body;

providing a logic addressable link to each of the oscillating motors using a high-speed control interface connected to the computer application;

generating an information packet containing logic address data designating one or more of the oscillating motors to activate on a computer using the computer application;

transmitting the logic address data to the high-speed control interface; and

[[translating]] decoding the logic address data using a first circuit in the high-speed control interface to activate the designated oscillating motors to provide multiple modes of operation depending on the type of software application, said multiple modes comprising a first mode that generates a high order data bit output that activates multiple embedded motors and a second mode that generates a low order data bit output that activates a single embedded motor, and said first circuit comprising two or more 4 x 16-bit decoders to generate both high order binary data outputs for activating multiple embedded motors and low order binary data

outputs for activating a single embedded motor, said high order and said low order bits decoded from a single binary number, wherein an at least 8-bit binary data input can generate at least 16 high order data outputs and at least 225 unique low order binary data outputs which are mapped to the human body..

16. (Previously Amended) The method for generating a touch sensation to a person using a computer application of Claim 15 further comprising the steps of:
- organizing the plurality of motors into specified sectors covering a portion of the body; and
 - translating the logic address data using the first circuit into a logic address for a specified sector to activate all motors in that sector and support multiple modes of operation.
17. (Original) The method for generating a touch sensation to a person using a computer application of Claim 16 wherein the software application is a game.

18. (Currently Amended) The method for generating a touch sensation to a person using a computer application of Claim 15 further comprising the steps of:
- organizing the plurality of motors into specified sectors covering a portion of the body;
 - [[translating]] decoding the logic_address data using the first circuit into a high order and low order bit value output; and
 - processing the high order and low order bit value outputs using a fire decision matrix to translate to a logic address to activate one motor which corresponds to a particular touch sensation within one sector and support multiple modes of operation.
19. (Original) The method for generating a touch sensation to a person using a computer application of Claim 18 wherein the software application is for medical treatment.
20. (Original) The method for generating a touch sensation to a person using a computer application of Claim 18 wherein the software application is for adult entertainment.